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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/890,613	07/31/2001	Michael Bischof	4191/PCT	4612
21553	7590	08/23/2004	EXAMINER	
FASSE PATENT ATTORNEYS, P.A. P.O. BOX 726 HAMPDEN, ME 04444-0726			EASTHOM, KARL D	
			ART UNIT	PAPER NUMBER
			2832	

DATE MAILED: 08/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/890,613

Applicant(s)

BISCHOF ET AL.

Examiner

Karl D Easthom

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 52-68 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 52-56 and 61-68 is/are allowed.
- 6) ☒ Claim(s) 57-60 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 57-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over DE

19523301 in view of Kojima et al. '591 DE '301 discloses the claimed invention as noted

below, except the diminishing length and increasing width of claim 57, meandering heater of

claim 61, varying widths of claim 63, and the gas function layer and contact point locations for

the remaining claims.. For claims 57 and 63, Fig. 8A of '591 discloses increasing width toward

the tip, and decreasing length, where the 3mm length is less than the 5mm length. For claim 61,

see Fig. 5. Or see Fig. 8B. Regarding the gas sensor layer, see layer 34 of Fig. 6, or also layer

57 at Fig. 15, attached to the opposite side of substrate 55 from heater 63, known as disclosed in

Kojima as a means to sense and control gas. This whole layer 57 can be considered part of the

gas function layer, so that it would have been obvious or implicit that the connections would be

under same, meeting claims 58-60. Or, for the gas function layer, see Fig. 18a, with same on the

opposite side of the substrate 102, meeting claim 58, as an obvious prior art set up.. The contact

point of claims 59, 60 is noted below as disclosed in DE '301. DE '301 discloses the gas

function layer where applicant states it is for a metal oxide sensor in his remarks of 6/25/4. It

is not clear if the gas function sensor layer is disclosed as supported by the sensor carrier section

next to a tip, absent a translation; however, same is an obvious means where Kojima discloses

function layers 56-57 supported by, and for claim 58, on the opposite side of the substrate of

the substrate 55. The contact point of DE '301, for claims 59-60 would be under same since the function layer is all along the device.

3. The arguments submitted 6/25/04 have been considered in full but are persuasive only as to the removed rejections. The argument that Kojima does not disclose the elements a-d on page 26 of applicant's arguments is not correct. . Fig. 8A has different heating values which depend on a spacing, they generate different heating values, since they vary in length, and the path length and width both vary, and the length diminishes while the width increases from section to section. For example, each section of the heater does not need to diminish according to the claim. The other relevant claims are interpreted as requiring same. So in Fig. 8a, the sections diminish from the tip side 5mm to the 3mm section, with an increase in width from section to section. It is not understood why applicant argues that the width is constant along the 3mm section for that is not material to the claim. The width need only increase from section to section. In Fig. 8B, each section does diminish, as there are only two sections. As to the argument that the gas sensor layer 57 of Fig. 15 of Kojima is not attached to the opposite side of the substrate 55, from the heater 63 this is not correct. All the layers are attached, and 63 is clearly on an opposite side of 55 than is 56, 57. The argument that applicant's gas function layer is on the tip, this is not material, since a layer that is all along the device is also next to the tip. Also, see 101 of Fig. 18A prior art or Fig. 6 disclosing function layer layers by the tip.

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO


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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl D Easthom whose telephone number is (272) 571-1989. The examiner can normally be reached on M-Th, 5:30AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on (272) 571-1989. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Karl D Easthom
Primary Examiner
Art Unit 2832

KDE